Evaluation Report

Industrial Technology Support Unit (ITSU)

Dakahlia Governorate

(IDRC Centre File Project 94-8602)

S. H. Kandil

Alexandria University, Egypt

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I. Background

The Governorate of Dakahlia is located at the middle of the Delta of Egypt, about 120 Kilometers away from Cairo. Dakahlia comprises twelve provinces (Markaz) which have many towns and villages. In Dakahlia exist various micro (less than 16 workers) and medium - sized (between 16-50 workers) firms which are dealing with various types of industries, and providing the Egyptian market by various products to address the needs of the lower - middle and working class of the Egyptian population.

I.1 Project Profile

A project entitled "Industrial Technical Support Unit (ITSU)" was run by the Regional Center for Research and Development (RCRD) as the delivery agent while the Businessmen Association (BMA) in Dakahlia Governorate acted as the collaborating agent. This project aimed at establishing a sectorially oriented industrial technological support unit in the province of Dakahlia, to develop small, micro and medium sized firms (SMMES). The project was supported by the International Development Research Center, (IDRC) Canada and received a grant of 248,000 CAD. The project took place between Oct. 1994-Feb.1997.

I.2 Objectives of the Project

- Solving the technical problems and constraints which prevent the development of small business establishment.
- Encouraging business owners to upgrade and improve their scale of operation.
- Fostering compatibility between small and big industries.

I.3 Objectives of this report

This report aims at evaluating the impact of the project, "industrial technical Support Unit (ITSU)", on the targeted groups and wider.

II. Method (Procedures) of Evaluation

1. The project documents and relevant reports were revised where an initial acquaintance with the project objectives and profile was achieved.
2. Interviews were conducted with Prof. Mohamed Abd El-Salam Owida, the principal investigator of the project and the director of the Regional Center for Research and Development (DCRD), as well as members of the delivery agent. (see appendix 1)
3. Interviews were conducted with members of the technical team and collaborative institution (see appendix 2)
4. The administrative structure / work plan of the project was reviewed (see appendix 3)
5. The technical work plan for conducting the technical auditing, assessing the needs and diagnosing the problems of the business enterprises was studied along with the recommendations conveyed for development and suggestions for implementations and follow - up of these recommendations.
6. A random sample of 10 reports of technical / administrative developmental studies of the investigated business enterprises were reviewed. Two were thoroughly studied and followed up.

7. Field visits were conducted to interview benefeciaries receiving technical support (particularly those whose reports were studied.

8. Feasibility studies applied to the "Social Fund" were reviewed; one was particularly investigated and followed up (appendix 4).

9. Seminars and training activities reports, training materials, and relevant documents were reviewed

10. The constructed data base / clearing house was thoroughly reviewed.

11. The existing library was visited

12. The manual guides; the series entitled "The world of small business" were reviewed (appendix 5).

13. The promotional posters / leaflets were reviewed.

14. The issued journal was reviewed (appendix 6).

15. The posters constituting a promotional exhibition (total of 36) were reviewed.

III. Conclusions / Findings

1. Inputs / activities

As stated before, the financial resources of the project, 248,000 CAD, were donated by IDRC, meanwhile the delivery agent was providing a physical location which helped the project to operate via an independent site where all participants could operate away from the influence of a governmental host. The local governerate of Dakahlia and the administration of the University of Mansoura provided political and technical support and constituted the pool for human resources needed for the project.

The project was run by a steering committee comprised of representatives of the organizations concerned with the small projects development in Dakahlia. Technical support groups (which included beneficiaries), institutional support group, experts and consultants were involved in running the project. Such structure allowed active interaction among participants and assured implementation of recommendations and

decisions. The management of the project was a key element for its success.

Moreover, the project cooperated with various research and development agencies, like the Center for Metallurgical Research and Development Institute, CMRDI, in Cairo, the Plastic Development Center, PDC, in Alexandria as well as the various faculties of Mansoura University. Such input insured a strong technical element in the services provided to the local small industries.

The financial institutions donating loans or grants for small industries were incorporated in the project management, this extended another dimension for supporting the beneficiaries.

The project conducted several meetings attended by all the stake holders, the introductory meeting was a kich off conference held under the auspices of the Governer of Dakahlia, the president of Mansoura University and the Secretary General of the Social Fund for Development. This conference was attended by the top officials of the local government, local parliament, banks executives, insurance agencies, taxation department officials, as well as the targeted beneficiaries. The minutes of this conference show that the objective and overall strategy of the project was well explained. The strategy to implement the project included this kick off conference as the first phase where information could be disseminated and ideas could get exchanged. The second phase comprised 13 discussion symposia for different industries or specific needs. Meanwhile the profile of the targeted small business workshops and industries was prepared by specialists from the university professors, government officials as well as the company representative. The third phase is looking into the recommendations of the discussion groups and concluding implementation mechanism via another comprehensive conference. The fourth and final phase is the implementation and follow up via the supervising and the steering committee.

The implementation mechanism went through activities managed by the steering committee / and satellite organization which constituted a network managed by the PI. This method of implementation insured the involvement and commitment of all collaborating parties. It paved the way for effective interaction among the delivery agent, the collaborating agencies and beneficiary industries.

When the project started assessing the technical needs of small, micro and medium sized firms, it was realized that what was hindering the

small industries progress is the lack of administrative skills inadequate organizational structure and the tense relationship with the various government departments / agencies. The project management was flexible enough to respond to this finding, therefore the assessment of the status of small industries was conducted through two teams; one for technical support while the other for institutional and administrative support. This proved to be more effective in addressing the needs of small industries.

The initial design of the project as appears from project document and meeting the PI was addressing mainly metal working industries in collaboration with the Central Metallurgical Research and Development Institute, Cairo and the support of the Faculty of Engineering of Mansoura University. It was noted that the project has extended its activities to cover more industries in various areas. This change of emphasis to the mind of the evaluator, is double edged as it is good to address wider needs of the industrial sector but you may loose amphasis of specific needs i.e. the technical support of small industries. The impact of the project would have been more stronger if the effort was focused on one industrial sector assured to receive quality technical support, however it is fair to conclude that this change of emphasis made a wider impact on small industries in the Dakahlia governerate.

The delivery agent produced a detailed guidelines for technical assessment of small business industries. This contained four main sections for a) Diagnostics, b) Recommendations, c) Implementation and d) Follow-up. These were comprehensive and included definition of the production lines, problems encountered, materials used, labor size and skills and its compliance with the production line, handling mechanics, quality control, detailed recommendations (general and specific), methods of implementation and follow-up. Moreover, a booklet was designed to collect data for case studies of small industries. This document included nine main items, touching upon workers, production, future activities, expansion plans, finance, marketing, management, problems hindering performance and impeding production and others. The booklet contained 91 items to be assessed semi- quantitatively. This was a well designed and informative document. It illustrated the depth with which the work was conducted, and furnished the roots for proper services to be provided.

2. Outputs

The project conducted various activities which constituted a very rich output. These activities touched upon 130 small business companies belonging to 19 different industrial categories.

The outputs of the project included a) technical support, b) managerial and institutional development support, c) credit facilities assistance and feasibility studies, d) industrial guidance, e) technical seminars and f) other activities. Each of these output deliverables needed to be analyzed in terms of their impact to the project accomplished.

2. a) Technical support services

The project conducted 62 technical support services where the technical input / output of the enterprise was fully analyzed according to a well structured criteria (as described in the previous section) to fullfill technical auditing. The metal industries received 44 audits while 10 were conducted in the plastic industry. A set of recommendations is usually reached by the technical experts and implemented by the help of the company management. The detailed study of these technical audits reveals that it is conducted in enough depth to address the production problems and insure industrial development.

One example is tackling the problem of durability of certain metallic product used as a car spare-part. The results of the chemical and microstructure analysis (appendix 7) of the raw materials as conducted at the Central Metallurgical Research and Development Institute (CMRDI) revealed that this specific part have inadequate concentration of manganese, chromium and molybdenum. Moreover, the microstructure analysis revealed why the use of this raw material will enhance its chances of failure as it had flacke internal structure which could act as a microcrack and cause inevitable failure. Other alternative alloys of adequate chemical composition and more uniform microstructure were considered as a substitute raw material, and when used proved to be more durable.

Another example touches upon the production line improvement in a plastic firm was considering changing the mold design for a plastic article to provide more flexibility in reaching a more convenient product.

These technical support services helped directly in a) improving the quality of companies products via better choice of the raw materials, b) increasing the competitiveness of these industries via improved products and c) opening new markets for these companies using their improved products.

On the other hand, these technical support services helped indirectly in a)changing the cult of small industries to be scientifically oriented, b) directed these industries towards interaction with scientific and technical institutions and c) regaining the confidence in tackling the market through knowing that a technical backup could be obtained and lead to improved products.

An interesting note to illustrate the above mentioned findings is the reflections of the project leaders and beneficiaries of the first trip organized by the project to the CMRDI. Beneficiaries were reluctant to go to this visit although transportation was provided free of change from door to door. After the visit was conducted and the results of the audits and product improvement became evident, the beneficiaries found their way to CMRDI which is located at the edge of greater Cairo, and they paid visits on their own asking for advise and seeking the institute's services. This could be taken as an evidence of a change of attitude which will insure that the results of the project will remain durable.

2. b) Administrative and Institutional Support Services:

It is interesting to note that the needs analysis for beneficiaries which was conducted by the project management revealed that the main obstacle hindering small industries production is their dealing with 14 different governmental agencies, like licenses department, industrial safety, public and social insurance. An unhealthy atmosphere of mistrust on both sides shed a negative impact on everyday life of conducting the business and the mere survival of these industries was threatened, forget about their development. The project studied this problem and helped the targeted groups of small industries via offering 56 institutional support services, 30 of them were directed to metal industries, while the plastic and related industries received 13 institutional support services.

Putting these services in the proper context guided the small and medium business industries to realize their rights and meet their duties and commitments. Also a strong message was conveyed to the government departments: that if those industries were educated about the right practices, they will be more cooperative and productive to the benefit of the country. Hence a healthy atmosphere stemmed out and cooperation between the owners of these small industries and the governmental department started to take place. Both sides realized that they could

comply with the industrial laws if mutual awareness was spread and clear practices were identified and asked to be followed. This was evidanced by a meeting with the social affairs ministry director who emphasized that his work become easier after creating a dialogue with industries and they become in more complience with the regulations.

These administrative and institutional support services helped the owners to deal with the governmental departments in a better way and solve their problems. Hence they could concentrate on the productivity aspects of their business. The most important achievement of this services as stated by the project leaders and verified by the governmental department, that the governmental civil servants changed their role from a watch person, looking for misconduct to pick upon and apply penalties, to a demonstrator helping the small industries and guiding them to achieve the correct practices. The civil servants realized that the project is helping them to run their job in a smoother and more effective way.

2.C) Credit Facilities Assistance and Feasibility Studies:

The project offered the facility of preparing economic feasibility studies to help extending credit facilities to small business enterprises. Small industries received 48 financial support soft loans with the help of the specialized team within the industrial technology support unit, 25 of these services were directed to the metal industries. The Industrial Development and Credit Bank along with commercial banks (Misr, Al-Ahly, Cairo, and Alexandria) have contributed along with the Social Fund for Development (SFD) to extend credit and financial services to small industries. One feasibility study submitted to the social fund for development which was conducted by the project was reviewed. It contained the credentials of the applicant; the owner of the industry and details of a marketing study, productivity study including premises, new materials, machinery, production cycle, salaries, expenditure etc. Then a financial study was conducted indicating the amount of the grant needed and its expenditure.

2.D) Industrial Guidance (extension)

The project contributed towards spreading information among labors and owners of workshops about the practices leading to the developments of their industry as well as the laws and regulations which

adjust their relationship with the governmental agencies. Outputs of the project were used to achieve such goal. These outputs included posters, bulletins, pamphlets, exhibitions, seminars, symposia and conferences.

The delivery agent coordinated with directorate of industrial safety in Dakahlia to reach local newspaper, magazines, TV local channel (no.6) and the Delta Radio Station. A non-periodical bulletin entitled "The World of Small Business" was issued via the project.

The most important output of industrial guidance, to the mind of the evaluator, is the series of pamphlets entitled: "Your Guide to...". These included guide books tackling the most pressing issues; examples of these are:

- Your guide to manpower
- Your guide to social insurance
- Your guide to general taxation
- Your guide to sales taxation
- Your guide to social fund for development and general banks
- Your guide to general authority of industrialization
- Your guide to environmental and professional grading
- Your guide to general authority of measuring standardization
- Your guide to ISO 9000
- Your guide to industrial pollution prevention (cartoon)

Inspecting the booklet entitled your guide to social fund for development and general banks, revealed that it contained the basic information about: a) the available loans, b) how it should be used, c) the pay-back regulations, d) the needed documents and certifications, and e) other special regulations.

Of each of these pamphlets, about 500 copies were issued. The production quality of these pamphlets may not be rated very high, but it is adequate and contains the essential useful information.

Moreover, the delivery agents produced a series of posters (63), dealing with industrial safety and environmental pollution and printed 100 copies of each to be distributed in the cities of Mansoura, Talkha and Mit-Ghamr. These posters might lack the professional and artistic elegance, but they are adequate and convey a strong message concerning industrial

practices. Interestingly enough these posters constituted an exhibition which was erected in various sites.

The industrial extension activities reached 112 companies, i.e. 86% of the companies have received extensive industrial guidance materials. Such activities helped raising the awareness of small businesses and disseminating the essential information concerning industrial and environmental safety to beneficiaries. It was quoted by Mr. Badeh, one of the smelters owners that "these people [project team] have shown me a very different world and although I thought that I know everything about my business, they made me learn a great deal more".

2.e) Technical Seminars

Technical Seminars were offered to industry. Out of 84 seminars, 47 were offered to metal companies (constituting 56%), while the plastics and related industries received 18 training seminars constituting 21% of such activity. These seminars were specific to particular group of industries, where the basic concepts and scientific and technical issues were highlighted by the help of specialized university professors and /or research and development experts. The technical material of the seminar on plastic recycling was revised. It contained the basic concepts on plastic degradation and the importance of recycling as a global environmental issue with emphasis on the benefit of plastics recycling as it saves the resources and protects the environment. The seminar was addressed by the specialists of this subject belonging to the University of Mansoura. The queries of business people were answered and this created a forum to assess the industrial needs and to start a dialogue to link university and research institutes with industry.

In general, the discussions guide lines in these seminars dealt with a) the present condition of the industry, b) features of the future prospects of these industries, c) evaluating the problems and obstacles that impeded the prospects of development, d) providing recommendations to solve the problems, and e) assigning the roles and responsibilities of related agencies in carrying out and implementing the recommendations. That was created a healthy forum for tilting the industry which conducted on little scientific base to perceive the scientific depth behind the technology and the practices used.

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2.f) Other outputs

There were other outputs for the project like offering training support opportunities to the owners of small business industries in the form of visits to research centers and developed industrial companies. Mutual visits took place between university consultants, and industrial workshop owners. Moreover, three visits were conducted by experts to Nova Scotia Research Foundation Co-operation (NSRFC) in Canada, each visit lasted for two weeks where a training course was attended. This reflected positively on the capacity building and awareness of the Egyptian industrial society of the new trends in the subject.

- Also general and specialized lectures were delivered through the project.
- A nucleus of a data base was initiated including information about small and medium businesses including the number of workers, sector distribution and geographical locations.
- Also a nucleus of a small library was initiated. the library contained the various documentation of the output of the project as well as the basic technical and other references needed to help the collaborating teams in their developmental task.
- The project offered support to various non governmental organizations NGOs, it supported the activities of RCRD, Dakahlia Business Association, Alexandria Businessmen Association, the Metallurgic Association in Mit-Ghamr, the Aluminum Society in Mit-Ghamr and others.

3. Context/Environment

The project was run in a proper environment. The involvement of the governor of Dakahlia and the president of Mansoura University, as well as the Secretary General of the Social Fund for Development insured a smooth course for the project. The governor has given the project the necessary political support and secured cooperation of the various governmental departments while the president of the University secured the technical support needed for the project. The Social Fund for Development provided several financial assistance to the small businesses when needed. The project management included the steering committee, the executive manager (the principle investigator PI), technical support group, institutional support group, experts and consultants as well as

leaders and officials of concerned agencies whose daily work and duties integrated with the project activities. Coordination among all those parties was a commendable achievement.

The background and experience of the PI as well as his dedication and enthusiasm, along with the cooperation and support of his colleagues, were to the evaluator mind, the key success for the project. In a way they conveyed to the evaluator a feel that they are believers of a strong message that the industrial output of their Governorate is important to the country and could be enhanced if receives adequate support. They have definitely conveyed this message to all stackeholders, therefore, the project was conducted in a proper context and healthy environment.

4. Reach

The project output reached various beneficiaries and users. table (1) shows the various outputs and their reach to small industries in Dakahlia. The project reached 130 small business companies belonging to 19 industrial categories. The metal forming companies amounted to 46, and the metal cutting were 27. The metal companies in general constituted 56% of the beneficiaries which is consistent with the original focus of the project. The plastics and related industries were 22 companies (plastic film 9, plastic recycle 5, and Millamien 8) constituted 17% of the beneficiaries. The other beneficiary industries constituted 27% of the total and varied among diversified activities including car spare parts, pipes, food processing, electronic devices, clothes, glass and other industries and activities.

The business owners and workers benefited from the services conducted by the project and used the services offered as it opened to them a new approach to tackle their problems.

The project also reached the delivery agent and the collaborating agents, their understanding and perception of small industry problems was better formulated and their handling to small industries problems became focused and more effective.

The collaborating governmental and other complementary agents were reached by the project and their involvement made them understand small business performance and production problems and helped the proper tackling of small industry problems.

The industrial guidance in the form of manuals and leaflets was very useful and effective. These manuals have given the optimum impact on the small industries. They instructed the business people how to benefit from the project activities, and how to deal with the various governmental departments concerned with business enterprises and who to contact for service or advise. They raised the general awareness among small industry leaders and workers concerning the quality of products as an entry to competitiveness (your guide to ISO 9000) as well as relevant issues, and illustrated the picture of small business in real context. Moreover, the leaflets conveyed a strong message about industrial safety aspects and environmental protection issues which were overlooked in the small industry world. One could not help feeling that the quality of production, lay out and design of these manuals could have been improved, but probably if it looked too sophisticated, it may not have given the same positive impact.

However the great demand on these leaflets made it necessary to reprint new copies. This could be taken as an indication of its positive reach and impact. It is unfortunate that the project did not consider in any stage a cost-sharing principle for the services offered to beneficiaries. Cost sharing could have been implemented by asking beneficiaries receiving technical support to provide accommodation and transportation of the visiting team in first stages, followed by paying for services (at low cost) in later stage and prepare them to accept paying full cost of technical services in final stage. This could have reflected in income generation for the delivery agent and helped towards the sustainability of the Industrial Technology Support Unit and the activities conducted through this unit.

2. Capacity building and its impact

The project helped in capacity building within the delivery agent, as members of ITSU (including the younger staff) were fully aware of the technical and administrative problems of small businesses and how to tackle them. Building such new cadres with a unique experience in industrial auditing and trouble shooting is an asset and meets an urgent need which reflects on productivity of small industries in particular and the Egyptian industry in general. The university members of staff and technical assistants who shared into this project acquired knowledge and experience of industrial auditing, design assessment and improvement, reverse engineering, solving industrial problem, recommending and implementing their own solutions. This will contribute to a more industry conscious society who is capable of handling his own problems. Probably this is a

long term expected impact. The evaluator was meeting some of the professors involved in the project. They were quoted "we know very little about the real industrial world before the project and we now learned a great deal about the society problems". They assigned the students to industrial problems for their graduation projects. It was noted that the infrastructure of the delivery agent was strengthened by acquiring some office facilities used for the project.

3. Creating job opportunities to university graduates and consultants

The project created job opportunities to university graduates. The assistance to technical auditing, preparing the implementation plans, following up the implementation activities, keeping and filing the documentation, accumulation of the data base, classification of the library and follow up the library resources as well as the reports of the project and its outputs needed young graduates who would take these challenges as a career. That was evidenced from the employee of the unit itself who joined the industry in a later stage. Also it created job opportunities for consultants to deal with industrial problems.

4. Changing the cult / and building an industry appreciating the scientific approach.

One of the most important impacts of this project is that it has changed the cult among the owners of small industries. They have realized that a scientific systematic approach could be useful and reflects positively on the quality of their products. In the metal industry, using the chemical analysis and microstructure would reveal the reasons for discrepancy of performance among different alloys. Using such modern scientific approach will end up in proper choice for raw materials and manufacturing of durable articles. For plastic industry, realizing that adding a virgin polymeric raw materials to the recycled plastics reflects on the property of the produced article and lead to optimum ratio producing the desired quality. That made the industry appreciate the fact that university could be of direct help to their daily problems, and could give practical solution based on deep knowledge and advanced methodology. The change in industry perception reflected on change in their cult and they directly approached the university and research institution asking for technical advise and services, an attitude which is new to the Egyptian industrial and scientific society. Such bridges between university and industry could be sustainable once the routes have been furnished by the project.

5. Policy and attitude changes

The project paved the way to policy changes and created a favorable atmosphere among governmental departments and small business industries. When both parties were illuminated of the problems and the constraints of each side, they became more considerate and willing to come to a meeting point where such dispute may be resolved. Smelters not being able to meet the constraints of environmental regulation were operating illegally without being granted licenses. There closure will help reaching a cleaner environment but they will be jobless and a social problem will replace the environmental one. On the other hand the production with its economy out put will be halted. The project convinced the local governmental department to give those smelting industries a transition period and allow them to operate in remote areas away from dense population to avoid affecting the health of inhabitants. The government department officials became incorporated into the problem and were keen to find a proper and just solution. They became convinced that helping the project is helping themselves to achieve their goals and fulfill their jobs. Their attitude turned from a police man attitude to a guidance and instructor attitude. A healthy atmosphere was created which have a positive impact on the industry and economy. Such an atmosphere could be sustainable if the right education and awareness is maintained on both sides. The project successfully linked between workshop owners and governmental bodies such as ministry of supply, industrial safety, taxations department, ministry of manpower, minimistry of social affairs and others.

6. Environmental impact

The project has kept an eye on dealing with environmental problems associated with small industries. Mit-Ghamr produces more than 70% of the aluminum house - ware used by the Egyptian working and lower-middle class. This is a recycled aluminum used to produce newly shaped aluminum articles which meets no standard specifications. The production procedure depended on kerosene, car-wash used oil and even damaged and rejected rubber tiers for fuel. A dark smoke cloud covered the site of these industries and constituted an environmental problem. The project succeeded in convincing these industries into turning to a different fuel burning system inspite of the fact that changing to the safer fuel containers is costly LE 4000. This produced had less impact on air pollution and cleaner environment due to changing industrial procedures.

7. Impact on other agencies

The project has paved the road for other agencies to follow on the activities conducted and the results achieved by the project. The Canadian International Development Agency CIDA selected Dakahlia governerate among many candidate governorates to carry out a long term project of 5 years duration with a large fund of 12 Million CAD aiming at developing a vocational training center and providing a business advisory service for small and medium size businesses. The delivery agent organized the field visits and the mutual meetings between the Egyptian and Canadian counterparts (e.g. businessmen, representative of governmental agencies, academics, researchers; etc...). Moreover, the project results illustrated that Dakahlia is a fertile land to expand on technical support. Thus a memorandum of understanding was adopted by both sides which reflects the impact of the project. The delivery agent felt that they could have received more political backup from IDRC to act as the delivery agent of the new project. Their hard work to help the new project probably justified such a feel.

8. Impact on NGOs

The project interacted with various NGOs in Dakahlia: Dakahlia Business Association DBA, the Metallurgical Association in Mit-Ghamr and Mansoura, the Aluminum Society in Mit-Ghamr. The project succeeded in helping the DBA to establish with the Social Fund for Development an incubator fund of 10 million LE for small business supporting 25-30 advanced projects in the area of Al-Magzar (Mansoura). This reflect on expanding the industrial activity feeding in new input in the Egyptian economy and enhancing the role of NGOs.

V. Enhancement of the Outcomes

1. The project has achieved interesting outcomes which needs to be documented in a professionally produced publication so that the experiment could be replicated in other areas. The evaluator believes that there is a lack of documentation of the valuable results of IDRC.

2. More depth research in the area of sociological attitudes of the workshop owners through the various project phases is needed. It could be useful to other groups addressing similar goals of the project

to the study how to change the attitude of small industry towards research approach.

3. The technical support services could be grouped, analysed and published in the form of case studies dealing with various industries. The experiences could be applicable to other industries in other regions.

4. The project outcome could have been greater if the delivery agent had focused its effort on one sector of industry, making a show case to develop these industries, conducting in depth research to reach royalties for the agent and industries. Then a cost sharing basis relationship could have been established. That would have made a model to attract other industries on cost-share basis which benefits the delivery agent and contributes to the issue of sustainability.

5. A small additional fund may be directed towards sustaining the activities of the project.

VI. Materials for Public Relations

This project contains a wealth of material for public relations. It shows how interaction among official organizations could lead through a visionary leadership to an impact on the progress of the industry and economy.

The choice of IDRC to support this project, and the choice of the delivery and collaborating agents, as well as the choice of the PI should be highly commended. The issue was vital the agents and the PI conducted a very successful job.

Response to Remarks on Evaluation Report
Industry Technology Support Unit (ITSU)
(94-8602)

- The emphasis of change of the project is based on the reading of the project document as well as meeting of the project leaders.

- **(Page 6) :** I mean by double-edged, that it is good to have flecibility to be able to change the focus of the project and make it address a wider needs, but you loose the focus of addressing a specific need and assessing its impact on society.

- **Page (15):** How cost sharing for services could been done?
  Cost sharing could have been implemented by asking beneficiaries receiving technical support to provide accommodation and transportation of the visiting team in first stages, followed by paying for services (at low cost) in later stages and prepare them to accept paying full cost of technical services in final stages.

- **Pages (17-18):** How paved the road?
  It was stated clearly. Moreover, we added that the project results inllustrated that Dakahlia is a fertile land to expand on technical support.

- **(Pages 8,9):** The evidence that the results will remain durable has been highlighted.

- **Page (10):** Some highlights of the evidence of the impact of extension and training have been added although I think it is self evidenced all over.

Potential Beneficiary / user	How benefit	Extent actually benefitted / affected	Factors helping (+), hindering (-) impact	Potential for future benefit
Delivery agent	gaining a huge experience about small industries and solving their problems	A technical team has been formed and became recognized in adddressing the problems	[+] IDRC support [+] PI experience [-] Limited number of team	Sustainability of this activity may be tried
Collaborative agent/university	Learn about industry, creat a market for their experience, students trained in industry	The researchers directed their work to real problem, new research project, self reliance and esteem.	[+] University leadership [+] University facility [+] Industry appreciation	Changing emphasis in university research to applied problems
Industry (small + medium)	Receiving institutional and technical support change their cult being more scientifically oriented became more competitive	quality of products improved, becaude more secure dealing with government. got guidance in dealing with banks / loans	[+] The intensity and dedication of project team [+] Invovement of the governor and government officials	The institutional and technical capacity gained will become sustainable
Government	Change polocy / reached ebtter complience from industry	regulations and laws become more flexible and adaptable and were followed by the industries	[+] mechanism of implementation [+] nature of the province	This attitude of government application will be sustained.